New data on Oribatids (Acari: Oribatida) from St. Lucia (Antilles). (Acarologica Genavensia LXXXIX)¹

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New data on Oribatids (Acari: Oribatida) from St. Lucia (Antilles). (Acarologica Genavensia LXXXIX). - Elaboration of the material collected by T. Jaccoud and L. de Roguin in St. Lucia in 1989. 67 species are identified and listed, 16 of them are described as new to science and one of them also represents a new genus: Paracarinogalumna gen. n. (Galumnidae). Licneremaeus antillensis Mahunka, 1985 = Licneremaeus discoidalis (Willmann, 1930): new synonymy.

Key-words: Acari - Oribatida - Taxonomy - New taxa - St. Lucia (Antilles).

INTRODUCTION

The soil-mite fauna of the Caribbean territory including the Lesser and the Greater Antilles is fairly well-known. The richness and the zoogeographical significance of the area have been shown by several authors (e.g. Grandjean 1929, 1930; Willmann 1933, Balogh & Mahunka 1974). The oribatids of St. Lucia have already been discussed by the present author (Mahunka 1985). The study of additional material preserved in the Muséum d'histoire naturelle, Geneva proves our fragmentary knowledge of this fauna. Part of this material is presented in this paper².

The material comprises 67 species of which 16 are new to science. For one of them a new genus is established. 25 known species are recorded for the first time for St. Lucia. Several endemic species, only known from the original descriptions, are recorded again together with many species already known from various regions of the Neotropics. In my previous paper (Mahunka 1985) 69 species are recorded for St. Lucia, now a total of 110 species are known from this island.

The terminology and the taxonomic arrangement correspond to my previous papers (e.g. Mahunka 1994).

¹ New title for the series "Neue und interessante Milben aus dem Genfer Museum I-LX" and "New and interesting mites from the Geneva Museum LXI-LXXX".

² This research programme was partly sponsored by the Hungarian Scientific Research Fund (OTKA 16729).

LIST OF LOCALITIES

- STL-79/1: Saint Lucia (Castries): Hotel Halcyon Sands et environs immédiats (jardin, forêt), sur la presqu'île de Vigie; (st.1), 14.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/2: Saint Lucia (Gros Islet): Pied du Mont Layau, avant le village de Monchy, vallée de l'Espérance River, rivière presque à sec, dans forêt de Lauriers et Manguiers; (st.2) 50 m; 15.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/3: Saint Lucia (Dennery): Entre Barre de l'Isle Ridge et la Mabouva Valley, avant le col, près de Thomaso, E de Morne Panache, forêt claire, prélèvement sur souche d'arbres pourris; (st.3.), 50 m; 16.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/4: Saint Lucia (Dennery/Dauphin): Pied du Piton Flore, au NW de Dernière Rivière, récolte de feuilles dans forêt dense, très en pente, avec falaises et abris sous roche; (st.4), 300 m; 17.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/5: Saint Lucia (Dennery): Entre Barre de l'Isle Ridge et la Mabouva Valley, avant le col, près de Thomaso, E de Morne Panache, forêt claire, prélèvement sur souche d'arbres pourris; (st.3.), 50 m; 16.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/6: Saint Lucia (Dennery): Entre Barre de l'Isle Ridge et la Mabouva Valley, avant le col, près de Thomaso, E de Morne Panache, forêt claire, prélèvement sur souche d'arbres pourris; (st.3.), 50 m: 16.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/7: Saint Lucia (Dennery): Entre Barre de l'Isle Ridge et la Mabouva Valley, avant le col, près de Thomaso, E de Morne Panache, forêt claire, prélèvement sur souche d'arbres pourris, tamisage, Berlese à Genève; (st.3.), 50 m; 16.VI.1979; leg. T. Jaccoud et L. de Roguin (WB)⁴.
- STL-79/8: Saint Lucia (Anse la Raye): Vers Massecré, au NE de Anse la Raye, végétation arbustive, dense mais peu haute, nombreux épineux, sol caillouteux; (st.5), 100 m; 17.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/11: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide prélèvement de sol; (st.6.), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/13: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide prélèvement de sol; (st.6), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/15: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide prélèvement de sol; (st.6), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/17: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide, tamisage; (st.6), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin.
- STL-79/18: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide prélèvement de sol; (st.6.), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.
- STL-79/19: Saint Lucia (Micoud/Soufrière): Quiless Reserve, à 500 m de Piton St. Esprit, forêt de pluie typique, très bien conservée (protégée), très humide prélèvement de sol; (st.6), 200-350 m; 19.VI.1979; leg. T. Jaccoud et L. de Roguin (B)³.

³ (B): extraction par appareils Berlese à Genève.

⁴ (WB): extraction par appareils Winkler-Moczarski sur place et par appareils Berlese à Genève.

LIST OF IDENTIFIED SPECIES

Mesoplophoridae Ewing, 1917

Mesoplophora hauseri Mahunka, 1982

Localities: STL-79/5: 8 specimens; STL-79/7: 2 specimens.

D i s t r i b u t i o n : Costa Rica (known from the type locality only); first record for St. Lucia.

Mesoplophora (Parplophora) subtilis Niedbała, 1981

Localities: STL-79/12: 5 specimens; STL-79-18: 3 specimens.

D i s t r i b u t i o n: Well distributed in the Neotropical and Oriental Region (see Niedbała 1985); first record for St. Lucia (Figs 1-3).

Phthiracaridae Perty, 1841

Hoplophorella lanceosetoides Mahunka, 1985

Locality: STL-79/8: 9 specimens.

D is tribution: St. Lucia (known from the type locality only); second record.

Hoplophorella scapellata (Aoki, 1965)

Locality: STL-79/8: 2 specimens.

Distribution: Perhaps Circumtropical; first record for St. Lucia.

Lohmanniidae Berlese, 1916

Meristacarus longisetosus Mahunka, 1978

Locality: STL-79/1: 3 specimens.

Distribution: Dominican Republic (known from the type locality only);

first record for St. Lucia.

Torpacarus omittens Grandjean, 1950

Locality: STL-79/8: 1 specimen.

Distribution: Well distributed in Central- and South America; second

record.

Trhypochthoniidae Willmann, 1931

Afronothrus incisivus neotropicus Balogh & Mahunka, 1974

Locality: STL-79/8: 2 specimens.

D is tribution: Cuba (known from the type locality only); first record for St. Lucia.

Allonothrus neotropicus Balogh & Mahunka, 1969

Locality: STL-79/1: 2 specimens.

D is tribution: Bolivia (known from the type locality only); first record for St. Lucia.

Archegozetes magnus mediosetosus Mahunka, 1978

Localities: STL-79/4: 4 specimens; STL-79/8: 25 specimens.

D i s t r i b u t i o n: Mauritius (known from the type locality only); first record for St. Lucia.

Epilohmanniidae Oudemans, 1923

Epilohmannia pallida americana Balogh & Mahunka, 1981

Locality: STL-79/4: 1 specimen.

D i s t r i b u t i o n: Paraguay (known from the type localities only); first record for St. Lucia.

Nanhermanniidae Sellnick, 1928

Cyrthermannia simplex Mahunka, 1985

Locality: STL-79/5: 3 specimens.

D is tribution: St. Lucia (known from the type locality only); second record.

Hermanniellidae Grandjean, 1934

Sacculobates horologiorum Grandjean, 1962

Localities: STL-79/1: 1 specimen; STL-79/8: 1 specimen.

D is tribution: Central America and Northern part of South America; second record.

Liodidae Grandjean, 1954

Teleioliodes zikani (Sellnick, 1930)

Locality: STL-79/4: 3 specimens.

Distribution: Brazil; first record for St. Lucia.

Microtegeidae Balogh, 1972

Microtegeus borhidii Balogh & Mahunka, 1974

Locality: STL-79/19: 3 specimens.

Distribution: Cuba (known from the type localities only); first record for St. Lucia.

Microtegeus hauseri sp. n.

Localities: STL-79/1; STL-79/17.

Microtegeus lucianus sp. n.

Localities: STL-79/2; STL-79/7; STL-79/17; STL-79/19.

Eremaeozetidae Piffl, 1962

Eremaeozetes lineatus Mahunka, 1985

Locality: STL-79/8: 1 specimen.

D is tribution: St. Lucia (known from the type locality only); second record.

Eremaeozetes roguini sp. n.

Locality: STL-79/7.

Microzetidae Grandjean, 1936

Berlesezetes auxiliaris Grandjean, 1936

Localities: STL-79/2: 1 specimen; STL-79/4: 1 specimen; STL-79/5: 4 specimens; STL-79/6: 5 specimens; STL-79/7: 7 specimens.

Distribution: Circumtropical; second record for St. Lucia.

Cosmozetes jaccoudi sp. n.

Locality: STL-79/19.

Eremulidae Grandjean, 1965

Eremulus nigrisetosus Hammer, 1958

Locality: STL-79/8: 3 specimens.

Distribution: South America: first record for St. Lucia.

Damaeolidae Grandjean, 1965

Fosseremus laciniatus (Berlese, 1905)

Locality: STL-79/4: 2 specimens.

Distribution: Cosmopolitan; first record for St. Lucia.

Eremobelbidae Balogh, 1961

Eremobelba piffli Mahunka, 1985

Localities: STL-79/1: 2 specimens; STL-79/4: 2 specimens; STL-79/8: 2 specimens.

Distribution: St. Lucia (known from the type locality only); second record.

Basilobelbidae Balogh, 1961

Basilobelba insularis Mahunka 1985

Localities: STL-79/4: 1 specimen; STL-79/8: 4 specimens.

Distribution: St. Lucia (known from the type locality only); second record.

Zetorchestidae Michael, 1898

Zetorchestes schusteri Krisper, 1984

Locality: STL-79/8: 3 specimens.

Distribution: Brazil: first record for St. Lucia.

Carabodidae C. L. Koch, 1837

Kalloia simpliseta Mahunka, 1985

Locality: STL-79/1: 5 specimens.

Distribution: St. Lucia (known the type locality only); second record.

Klapperiches penicillus sp. n.

Localities: STL-79/2; STL-79/12.

Tectocepheidae Grandjean, 1954

Tegeozetes tunicatus Berlese, 1913

Locality: STL-79/4: 3 specimens.

Distribution: Circumtropical; second record for St. Lucia.

Dampfiellidae Balogh, 1961

Beckiella vitiosa Mahunka, 1985

Localities: STL-79/3: 1 specimen; STL-79/7: 2 specimens.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second record.

Cuneoppiidae Balogh, 1983

Cuneoppia laticeps Balogh & Mahunka, 1969

Locality: STL-79/4: 1 specimen.

D i s t r i b u t i o n: Bolivia (known from the type locality only); first record for St. Lucia.

Oppiidae Grandjean, 1951

Aeroppia adjacens Mahunka, 1985

Localities: STL-79/1: 2 specimens; STL-79/4: 1 specimen; STL-79/8: 1 specimen.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second record.

Aeroppia hammerae Mahunka, 1985

Localities: STL-79/1: 1 specimen; STL-79/3: 4 specimens.

D istribution: St. Lucia (known from the type locality only); second record.

Aeroppia asymmetrica Mahunka 1985

Localities: STL-79/1:5 specimens; STL-79/8:3 specimens.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second record.

Amerioppia extrema Mahunka 1985

L o c a l i t i e s : STL-79/1: 3 specimens; STL-79/3: 1 specimen; STL-79/8: 1 specimen; STL-79/13: 2 specimens.

D is tribution: St. Lucia (known from the type locality only); second record.

Amerioppia paraguayensis Balogh & Mahunka, 1981

Locality: STL-79/3: 5 specimens.

Distribution: Paraguay, Brazil; first record for St. Lucia.

Dissorhina neotropicalis sp. n.

Locality: STL-79/19.

Gittella insularis sp. n.

Locality: STL-79/17.

Machuella ventrisetosa Hammer, 1961

Locality; STL-79/19: 2 specimens.

Distribution: Neotropics and Oriental Region; first record for

St. Lucia.

Moritzoppia subfallax sp. n.

Locality: STL-79/17.

Multioppia insularis Mahunka, 1985

Locality: STL-79/19: 2 specimens.

Distribution: St. Lucia (known from the type locality only); second record.

Oppiella nova (Oudemans, 1902)

Localities: STL-79/5: 2 specimens; STL-79/11: 8 specimens; STL-79/13: 1 specimen.

Distribution: Cosmopolitan; second record for St. Lucia.

Oxyoppia antillensis sp. n.

Localities: STL-79/6; STL-79/13.

Striatoppia tribuliformis Balogh & Mahunka, 1981

Locality: STL-79/4: 2 specimens.

D is trib ution: Paraguay (known from the type locality only); first record for St. Lucia.

Suctobelbidae Jacot, 1938

Suctobelbella baculifera Balogh & Mahunka, 1981

Locality: STL-79/19: 2 specimens.

D is tribution: Paraguay (known from the type locality only); first record for St. Lucia.

Suctobelbella complexa (Hammer, 1958)

Locality: STL-79/19: 2 specimens.

Distribution: Neotropics; first record for St. Lucia.

Suctobelbella variosetosa (Hammer, 1961)

Localities: STL-79/13: 3 specimens; STL-79/19: 2 specimens. Distribution: Circumtropical; second record for St. Lucia.

Cymbaeremaeidae Sellnick, 1928

Scapheremaeus longilamellatus Mahunka, 1985

Locality: STL-79/1: 1 specimen.

Distribution: St. Lucia (known from the type locality only); second record.

Licneremaeidae Grandjean, 1931

Licneremaeus discoidalis (Willmann, 1930)

= Licneremaeus antillensis Mahunka, 1985 nov. syn.

Localities: STL-79/18: 1 specimen; STL-79/19: 2 specimens.

Distribution: Guatemala; St. Lucia.

Scutoverticidae Grandjean, 1954

Arthrovertex hauseri Mahunka, 1985

L o c a lities: STL-79/2: 1 specimen; STL-79/3: 1 specimen; STL-79/19:

2 specimens.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second

record.

Parakalummidae Grandjean, 1936

Parakalumma piton sp. n.

Localities: STL-79/3; STL-79/6; STL-79/7; STL-79/12; STL-79/17.

Mochlozetidae Grandjean, 1960

Mochlozetes asculpturatus Mahunka, 1985

Locality: STL-79/1: 6 specimens.

D is tribution: St. Lucia (known from the type locality only); second record.

Unguizetes similis sp. n.

Localities: STL-79/1; STL-79/19.

Oripodidae Jacot, 1925

Benoibates minimus Mahunka, 1985

Localities: STL-79/12: 1 specimen; STL-79/17: 2 specimens.

D is tribution: St. Lucia (known from the type locality only); second record.

Oripoda lobata Mahunka, 1985

Localities: STL-79/8: 2 specimens; STL-79/17: 3 specimens.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second record.

Haplozetidae Grandjean, 1936

Nasobates mirabilis Balogh et Mahunka, 1969

Locality: STL-79/2: 2 specimens.

Distribution: South- and Middle-America; first record for St. Lucia.

Peloribates antillensis (Mahunka, 1985)

L o c a l i t i e s : STL-79/4: 1 specimen; STL-79/7: 1 specimen; STL-79/19: 3 specimens.

D i s t r i b u t i o n: St. Lucia (known from the type locality only); second record.

Peloribates capucinus (Berlese, 1908)

Locality: STL-79/18: 1 specimen.

Distribution: Cosmopolitan; first record for St. Lucia.

Rostrozetes carinatus Beck, 1962

 $L\ o\ c\ a\ 1\ i\ t\ i\ e\ s:\ STL\text{-}79/1:\ 2\ specimens;\ STL\text{-}79/3:\ 3\ specimens;\ STL\text{-}79/13:$

1 specimen.

Distribution: Neotropical; first record for St. Lucia.

Rostrozetes ovulum (Berlese, 1908)

Localities: STL-79/4: 2 specimens; STL-79/13: 1 specimen. Distribution: Circumtropical; first record for St. Lucia.

Austrachipteriidae Luxton, 1985

Lamellobates molecula (Berlese, 1916)

Localities: STL-79/4: 2 specimens; STL-79/8: 6 specimens. Distribution: Circumtropical; first record for St. Lucia.

Phenopelopidae Petrunkevitch, 1955

Eupelops spongiosus sp. n.

Locality: STL-79/8.

Epactozetidae Grandjean, 1930

Truncozetes rugosus sp. n.

Locality: STL-79/1.

Galumnidae Jacot, 1925

Galumna flabellifera Hammer, 1958

Locality: STL-79/1: 15 specimens.

Distribution: Circumtropical; second record for St. Lucia.

Galumna hamifer Mahunka, 1985

Localities: STL-79/5: 3 specimens; STL-79/8: 9 specimens.

Distribution: Guadeloupe, Brazil; first record for St. Lucia.

Paracarinogalumna genavensium gen. n., sp. n.

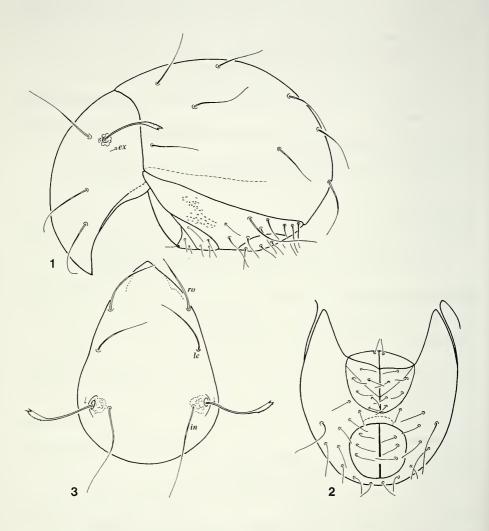
L o c a l i t i e s : STL-79/1; STL-79/5; STL-79/8; STL-79/11; STL-79/15; STL-79/17.

Pergalumna cucheae sp. n.

Locality: STL-79/1.

Pilogalumna antillensis sp. n.

Locality: STL-79/8.



Figs 1-3

Mesoplophora (Parplophora) subtilis Niedbała, 1981 – 1: body in lateral aspect, 2: anogenital region, 3: aspis in dorsal aspect.

DESCRIPTION OF THE NEW TAXA

Microtegeus hauseri sp. n.

Figs 4-5

Material examined: Holotype: St. Lucia: STL-79/17; 1 paratype: STL-79/1. Holotype: MHNG⁶, 1 paratype (1556-PO-96): HNHM⁷.

M e a s u r e m e n t s . – Length of body: 198-214 $\mu m,$ width of body: 126-134 $\mu m.$

Prodors um: Rostral apex conical. Lamellae wide, without sharp inner spur, but a well developed incisure present. Surface of prodorsum granulated, the granules only partly composing a polygonal reticulation. Rostral setae simple, straight, lamellar setae arising on the anterior margin of the lamellae, slightly dilated basally. Interlamellar setae short, bacilliform, a characteristic, strong thickening present at their insertion. Sensillus conspicuously long, directed laterally and backwards, its capitulum elongate, with strong spines on its surface (Fig. 4).

Notogaster: Well granulated, the granules form a polygonal reticulation. Larger protruding tubercles absent, in lateral view surface appearing irregular. Ten pairs of short, straight, bacilliform or spiniform notogastral setae present. Two median setae arising very near to each other.

Ventral regions (Fig. 5): Weakly sclerotised, apodemes and epimeral borders composing a disjoint reticulation. Sternal apodeme absent between apodemes 2 and the sejugal ones. Discidium smaller than in the following species. Ventral plate irregularly granulated. One shorter, one long longitudinal and one transversal lath observable. Neither tubercles nor protuberances along the genital aperture. All setae in the anogenital region minute, simple, excepting the median anterior genital setae.

R e m a r k s: Refer to the remarks on the following species.

Derivation ominis: I dedicate the new species to my friend Dr Bernd Hauser, in recognition of his enormous efforts in managing research on soil-microarthropods during his activity as curator of the Department of Arthropods of the Geneva Museum from 1968 to 1998.

Microtegeus lucianus sp. n.

Figs 6-7

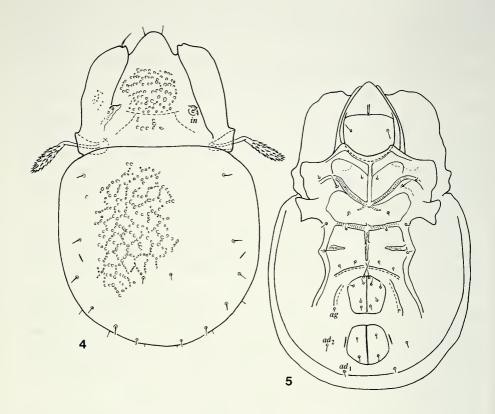
Material examined: Holotype: St. Lucia: STL-79/7; 1 paratype: STL-79/2; 3 paratypes: STL-79/17; 1 paratype: STL-79/19. Holotype and 3 paratypes: MHNG, 2 paratypes (1555-PO-96): HNHM.

M e a s u r e m e n t s . – Length of body: 198-235 μ m, width of body: 105-139 μ m.

Prodorsum: Rostrum conical. Lamellae very wide, with well developed incisure and spur on their anteromedian corner, with a transversal lath between them. Lamellar surface covered by smaller, interlamellar region with greater, pustules or granules, the latter form a polygonal sculpture. Rostral setae thin, arched inwards,

⁶ MHNG: deposited in the Muséum d'histoire naturelle, Geneva.

⁷ HNHM: deposited in the Hungarian Natural History Museum, Budapest, with an identification number of the specimen in the Collection of Arachnida.



Figs 4-5

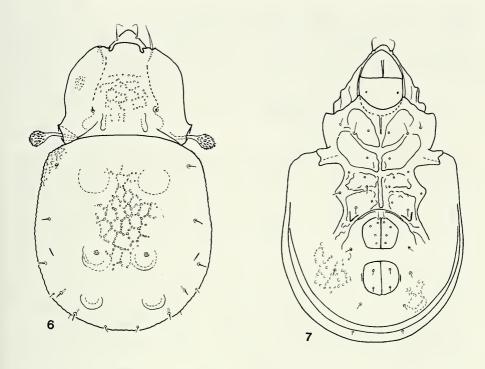
Microtegeus hauseri sp. n. – 4: body in dorsal aspect, 5: body in ventral aspect.

lamellar setae arising on the rounded anterior margin of lamellae, they are basally dilated. Interlamellar setae short, slightly bacilliform. Sensillus capitate, its dorsal surface with blunt spines.

N o t o g a s t e r (Fig. 6): Three pairs of large projections (clearly visible under low magnification) on the notogaster. Its surface covered also by pustules and granules like the prodorsal ones and mostly also forming a kind of polygonal pattern. Ten pairs of spiniform, short notogastral setae present, their position typical for the family.

V e n t r a l r e g i o n s (Fig. 7): Coxisternal region strongly sclerotised, all epimeral borders and the apodemes conspicuous. Epimeral setal formula: 3 - 1 - 3 - 3. All epimeral setae slightly spiniform. Anogenital setal formula: 5 - 1 - 2 - 2. Lyrifissures *iad* in adanal position.

Legs: All legs monodactylous.



FIGS 6-7 *Microtegeus lucianus* sp. n. – 6: body in dorsal aspect, 7: body in ventral aspect.

R e m a r k s: On the basis of the sculpture of the notogaster (resembling Eremobelba) these two new species are readily distinguished from all heretofore known species of the genus. M. hauseri is distinguished from M. lucianus by the unique form of the sensillus.

Derivatio nominis: Named after St. Lucia.

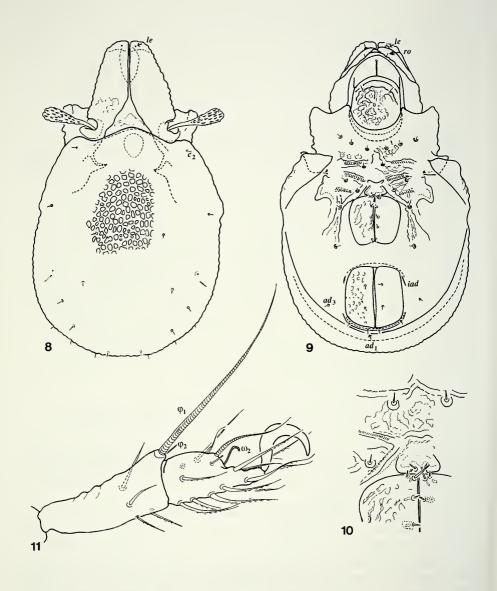
Eremaeozetes roguini sp. n.

Figs 8-11

Material examined: Holotype: St. Lucia: STL-79/7; 1 paratype: from the same sample. Holotype: MHNG, 1 paratype (1557-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 346-367 μ m, width of body: 205-226 μ m.

Prodors um: Lamellae large, covering the whole prodorsal surface, except posteromedially. Cerotegument layer (as on the rest of the body) thick, composed of irregular rugae. None of the prodorsal setae visible in dorsal view, rostral and lamellar setae minute, interlamellar setae absent. Sensillus conspicuously long and narrow, fusiform, its margin waved, surface mostly with bacilliform spines (Fig. 8).



Figs 8-11

Eremaeozetes roguini sp. n. – 8: body in dorsal aspect, 9: body in ventral aspect, 10: posteromedian part of the coxisternal region, 11: tarsus and tibia of leg. I.

Notogastral surface ornamented by a polygonate design, created by irregular foveolae. The distance among the foveolae comparatively large, so the border-lines mostly wide. Lacking separate median and or lateral part of the notogaster. Ten pairs of minute, straight and simple, spiniform notogastral setae present, two pairs among them arising medially. Lyrifissures *im* and the glandular opening also seen.

G n a t h o s o m a : Mentum strongly rugose having a characteristic transversal lath anteriorly.

Ventral regions (Fig. 9): The whole surface well sclerotised, but the epimeral borders and the apodemes faint and only partly observable. A characteristic median thickening exists in front of the genital aperture (Fig. 10). Epimeral setal formula: 3 - 1 - 2 - 2, setae 3c and 4c absent or not visible. Surface of the genital plate also rugose, the anal plate foveolate. Along the genital opening a pair of strong longitudinal rugae visible. Anogenital setal formula: 6 - 1 - 2 - 3. All setae minute, excepting the inner pair of anterior genital setae. Both pairs of posterior adanal setae (ad_1, ad_2) inserted on an arched lath.

L e g s : All legs with strong claws. The surface of the joints well rugose, the femur of leg III and IV widened, bearing a blade-like formation. Solenidia ϕ_1 and ϕ_2 of leg I arising on a large process (Fig. 11), ϕ_2 very small.

R e m a r k s: On the basis of the characteristic polygonate sculpture of the notogaster, the new species stands very near to *Eremaeozetes undulatus* Mahunka, 1985, also described from St. Lucia. The new species may be distinguished from *Eremaeozetes undulatus* by its much longer sensillus and the much smaller "cell" of the sculpture, and especially by the sculpture of the coxisternal region in front of the genital opening.

Derivatio nominis: I dedicate the new species to the collector of this material, late Dr L. de Roguin (Muséum d'histoire naturelle, Geneva).

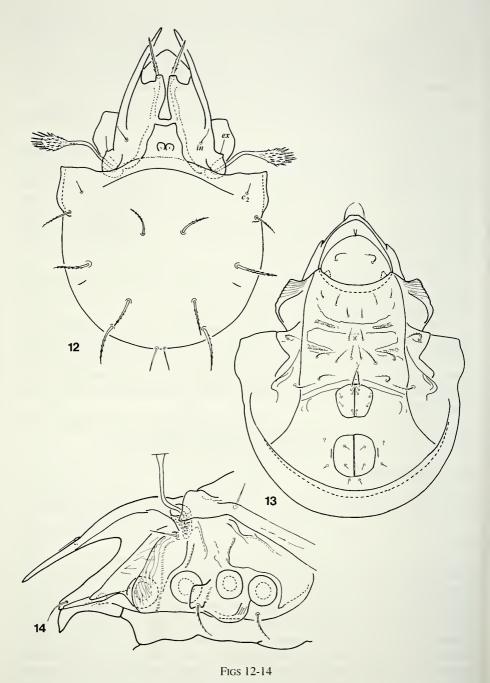
Cosmozetes jaccoudi sp. n.

Figs 12-14

Material examined: Holotype: St. Lucia: STL-79/19; 27 paratypes: from the same sample. Holotype: MHNG and 18 paratypes: MHNG, 9 paratypes: (1558-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 223-251 $\mu m,$ width of body: 166-186 $\mu m.$

Prodors um: Rostral apex triangulate in dorsal aspect (Fig. 12), beak-shaped in lateral aspect (Fig. 14). Lamellae typical for the genus, connected by an arched translamella medially. Their lateral cusps very long and strong, median cusps resembling tubercles, hardly protruding; lamellar seta arising on it. Rostral setae slightly, lamellar seta strongly, thickened, the latter spiniform, directed outwards, crossing the outer cusps of lamellae. Interlamellar setae fine, short, located on the lamellar surface. One pair of nearly round structures present in the interlamellar region. Exobothridial setae conspicuously long, straight, arising on small tubercles. Sensillus directed outwards, its pedicel long, capitulum rounded with long spines, which are shorter proximally than distally.



Cosmozetes jaccoudi sp. n. – 12: body in dorsal aspect, 13: body in ventral aspect, 14: podosoma in lateral aspect.

Not og a ster: Dorsosejugal suture indistinct. Pteromorphae small, ending in sharp, triangular lateral cusps. Notogastral margin slightly excavated laterally. Strong heterotrichy among the notogastral setae, c_2 the shortest. All slightly ciliate.

Lateral part of podosoma: Tutorium well developed, it is simple with a normal, spiniform apex, continued in a long lath, reaching the insertion of the rostral setae (Fig. 14). Pedotecta I distinctly rugose, pedotecta 2-3 conspicuously large, seta 3c arising on its surface. Discidium also well developed. Circumpedal carina not reaching to the lateral margin of the ventral plate.

G n a t h o s o m a: All setae and eupathidium of the palpal tarsus spiniform, nearly equal in length and arising marginally around the joint. Setae of palpal tibia much thinner than tarsal ones.

V e n t r a l r e g i o n s (Fig. 13): Apodemes and epimeral borders typical for the family. Epimeral setal formula: 3 - 1 - 3 - 3. All setae conspicuously ciliate. Anogenital setal formula: 6 - 0 - 2 - 3. Anterior pair of genital setae much longer than the others, conspicuously ciliate. All the other setae in this region small and fine.

R e m a r k s: The heretofore known species of the genus *Cosmozetes* Balogh & Mahunka, 1969 are distributed in Bolivia, Brazil and Cuba. On the basis of the spiniform lamellar setae the new species stands nearest to *C. striatissimus* Balogh & Mahunka, 1969 (from Bolivia). However, in the new species the characteristic striation of the lamellae is absent and the outer lamellar cusp is much longer than the lamellar setae (equal in length in *C. striatissimus*) and no interlamellar structure is present in *C. striatissimus*.

Derivatio nominis: I dedicate the new species to Mr T. Jaccoud (Muséum d'histoire naturelle), collector of this material.

Klapperiches penicillus sp. n.

Figs 15-18

Material examined: Holotype: St. Lucia: STL-79/12; 4 paratypes: from the same sample; 2 paratypes: STL-79/2. Holotype and 3 paratypes: MHNG, 3 paratypes: (1559-PO-96): HNHM.

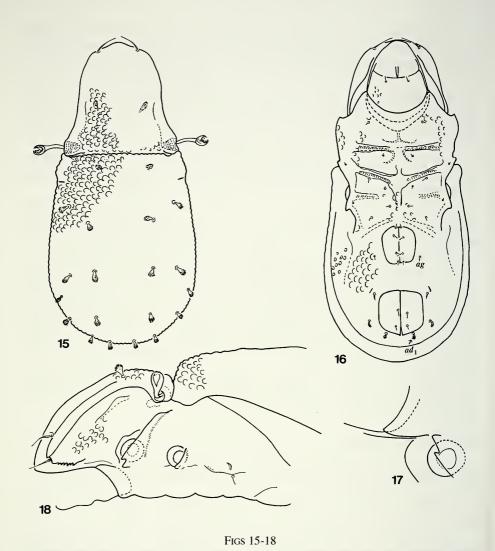
M e a s u r e m e n t s . - Length of body: 341-372 $\mu m,$ width of body: 155-180 $\mu m.$

Prodorsum: Rostrum widely rounded, lamellae narrow, running marginally. Rostral and lamellar setae thin, simple, interlamellar ones penicillate. Lamellar surface smooth, interlamellar region distinctly pustulate. Sensillus comparatively long, directed outwards, its capitulum calyciform, open laterally (Fig. 15).

Notogaster: Whole surface pustulate. Dorsosejugal suture nearly straight. Ten pairs of small, penicillate notogastral setae present.

Lateral part of podos om a: Tutorium present. Near to the rostral margin a characteristic, serrate minitectum present (Fig. 18), it is connected with the lamellar apex. Surface of the lateral part also ornamented by large foveolae. Pedoctecta I with a sharp tooth on its distal end (Fig. 17).

Ventral regions (Fig. 16): Mentum and coxisternal region medially and laterally foveolate. Ventral plate pustulate medially and foveolate laterally.



Klapperiches penicillus sp. n. – 15: body in dorsal aspect, 16: body in ventral aspect, 17: pedotecta I, 18: podosoma in lateral aspect.

Epimeral borders, excepting the posterior ones, conspicuous. Epimeral setae minute, epimeral setal formula: 1 - 1 - 3 - 3. Four pairs of genital, one pair of aggenital, two pairs of anal setae simple, the aggenital setae thickened, conspicuously ciliate, ad_1 penicillate, like the notogastral setae.

R e m a r k s: On the basis of the position of the genital plates, the new species is readily classified with the hitherto monotypic genus *Klapperiches* Mahunka, 1978. It is distinguished from the type species (*K. nigrisetosus* Mahunka, 1978) by the small and penicillate notogastral setae and the much longer sensillus.

Derivatio nominis: Named after the characteristic form of the notogastral setae.

Dissorhina neotropicalis sp. n.

Figs 19-21

Material examined: Holotype: St. Lucia: STL-79/19; 6 paratypes: from the same sample. Holotype and 4 paratypes: MHNG, 2 paratypes: (1560-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 276-302 $\mu m,$ width of body: 155-171 $\mu m.$

Prodors um: Rostral apex separated by two incisions, as typical for the genus. Rostral setae arising on this small, triangular apex. Prodorsal costulae of typical design, composing a strong structure, but not reaching to the lamellar setae. Bothridium also well sclerotised, with two separate tubercles behind it. Sensillus directed outwards, with fusiform, well-dilated capitulum, 2-3 minute spicules visible on its distal end.

Not og a ster: Median part of the dorsosejugal region protruding anteriorly, straight medially (Fig. 19). Ten pairs of simple notogastral setae, c_2 short, setae h_1 much longer than setae p_2 and p_3 .

Lateral part of podos om a: Exobothridial surface smooth, granules visible only around the acetabula. A well sclerotised longitudinal lath, and the two tubercles behind the bothridium, mentioned above, observable. Exobothridial setae extremely strong (Fig. 21).

Ventral regions (Fig. 20): Coxisternal plate well sclerotised. Epimeral borders linked by transversal crests resembling small bridges. Epimeral setae short, simple; setae 1c arising on a longitudinal crest, setae 3c the longest of all. Anogenital setae conspicuously short, minute (excepting the anteromedian pair of genital ones). Their number and position typical for this genus.

R e m a r k s: The new species stands very close to *Dissorhina ornata* (Oudemans, 1900). The two species are difficult to distinguish, because of the high variability of several characters. However the form of the sensillus is decisive in the separation of these two species. The sensillus of *D. ornata* is much longer than that of *D. neotropicalis* sp. n. and bacilliform, only gradually thickened distally (Fig. 22). In the new species the sensillus is fusiform and has a well-separated head. An other distinguishing feature could be the degree of sclerotization of the coxisternal region (stronger in *D. neotropicalis*).

Derivation ominis: This is the first *Dissorhina* species from the Neotropical region, all others are known from the Holarctic.

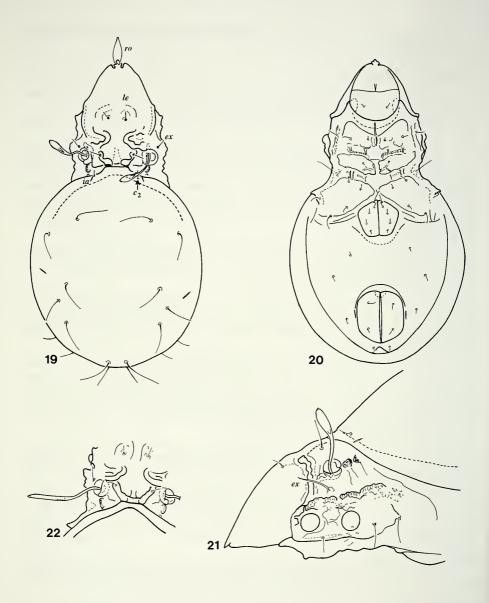
Gittella insularis sp. n.

Figs 23-26

Material examined: Holotype: St. Lucia: STL-79/17; 3 paratypes: from the same sample. Holotype and 2 paratypes: MHNG, 1 paratype: (1561-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 576-642 $\mu m,$ width of body: 255-297 $\mu m.$

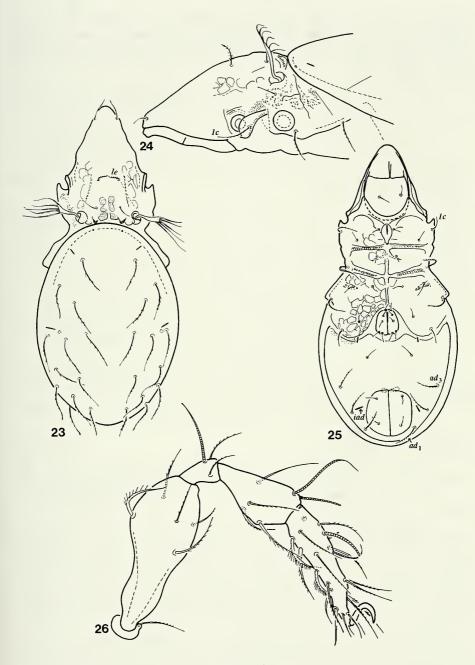
Prodors um: Rostral part elongated, rostrum rounded. Weak lamellar lines present, which reach over to the insertion point of the lamellar setae. Three pairs



Figs 19-22

Dissorhina neotropicalis sp. n. – 19: body in dorsal aspect, 20: body in ventral aspect, 21: podosoma in lateral aspect.

Dissorhina ornata (Paoli, 1908). – 22: basal part of prodorsum in dorsal aspect.



Figs 23-26

Gittella insularis sp. n. – 23: body in dorsal aspect, 24: podosoma in lateral aspect, 25: body in ventral aspect, 26: leg I.

of large spots and a pair of strong tubercles present in the interbothridial region (Fig. 23). The latter directed posteriorly. Rostral setae thin and simple, arising near to the lateral margin. Lamellar setae conspicuously ciliated, rostral and interlamellar setae smooth. Sensillus slightly dilated, with 5-6 long flagellate branches. Exobothridial region granulate.

N o t o g a s t e r: Twelve pairs of long notogastral setae and the alveoli of setae c_2 present. All notogastral setae with 4-6 comparatively long cilia. A pair of spots, near to the lyrifissures *iad* visible.

Lateral part of podos om a: Pedotecta I narrow, setae *Ic* arising on it. The tectum, below the acetabula, disconnected behind pedotecta I (Fig. 24). A weak polygonal sculpture anteriorly and some crests and granulated areas above the acetabula of leg II-III present.

V e n t r a 1 r e g i o n s (Fig. 25): Some parts of the surface (e.g. along the apodemes) covered by cerotegument granules. Epimeral borders and apodemes conspicuous, *ap.* 2 in straight transversal position, with a rounded thickening in front of it. Genital opening located comparatively posteriorly, epimera IV completely framing it. This surface has a polygonal sculpture. Epimeral setal formula: 3 - 1 - 3 - 3. Some of these setae conspicuously ciliate. Anogenital setal formula: 5 - 1 - 2 - 3, Adanal setae with long cilia. Lyrifissures *iad* in inverse apoanal position.

L e g s: All joints of legs thick, somewhat narrowed at both ends. Especially thick is the femur of leg I (Fig. 26). Their setal formula typical for the family:

R e m a r k s: The new species fits well into the genus *Gittella* Hammer, 1961. It is distinguished from the other species by the size of the prodorsal condyles, the length of the notogastral setae and the form of the sensillus.

Derivation ominis: It is named for its island locality.

Moritzoppia subfallax sp. n.

Figs 27-29

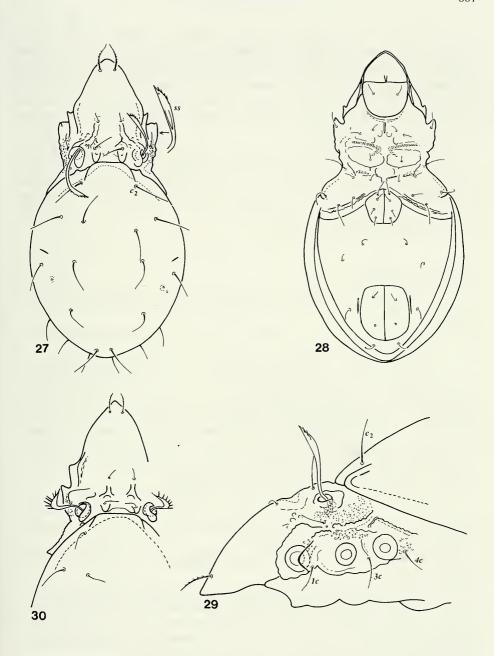
Material examined: Holotype: St. Lucia: STL-79/17; 5 paratypes: from the same sample. Holotype and 3 paratypes: MHNG, 2 paratypes: (1562-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 266-317 μ m, width of body: 145-171 μ m.

Prodors um: Rostrum rounded, ciliated, rostral setae arising on the prodorsal surface. Well developed, inverse Y-shaped costulae. A pair of other laths run forwards from the bothridia, they do not connect with the costula. Some small tubercles visible in front of them. One pair of V-shaped laths also present in the interbothridial region basally. Lamellar and interlamellar setae smooth, thinner and shorter than the rostral ones. Bothridia with basal tubercles. Sensillus asymmetrically expanded, with short spines unilaterally.

Notog as ter: Dorsosejugal suture nearly straight medially, carina and a pair of humeral apophyses conspicuous. Setae c_2 not shorter than the other nine pairs of notogastral setae (Fig. 27).

Lateral part of podosoma: Well granulated, with some stronger laths (Fig. 29). Exobothridial setae hardly shorter than the interlamellar ones.



Figs 27-30

Moritzoppia subfallax sp. n. – 27: body in dorsal aspect, 28: body in ventral aspect, 29: podosoma in lateral aspect.

Lauroppia fallax (Paoli, 1908). – 30: prodorsum in dorsal aspect.

V e n t r a 1 r e g i o n s : Coxisternal region well sclerotised, most of the apodemes and borders well visible. A characteristic, serrate, transversal crista present along the posterior border of the coxisternal region. Sejugal borders thick, with longitudinal, parallel lines. Epimeral setae simple, thin, setae Ic arising laterally on the margin of pedotecta I (Fig. 28). Anogenital setal formula: 4 - 1 - 2 - 3. Setae ad_1 in postanal, setae ad_3 in preanal position. The latter inserted closer to the aggenital setae than to other adanal setae.

R e m a r k s: The habitus, primarily the prodorsal and notogastral structure closely resembles the type species of the genus *Lauroppia* Subías & Rodriguez, 1986 (cf. Fig. 30: fallax Paoli, 1908). But on the basis of the number of genital setae and the well developed setae c_2 , the new species would be better be placed in the genus *Moritzoppia* Subías & Rodriguez, 1988 (Subías & Balogh 1989), however I consider this as a somewhat provisional solution.

Derivatio nominis: It is named after the closely related species.

Oxyoppia antillensis sp. n.

Figs 31-33

Material examined: Holotype: St. Lucia: STL-79/13; 7 paratypes: from the same sample; 2 paratypes: STL-79/6. Holotype and 6 paratypes: MHNG, 3 paratypes: (1563-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 193-211 μ m, width of body: 91-102 μ m.

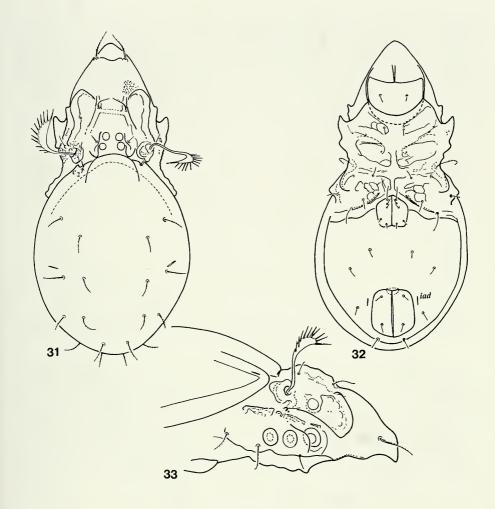
Prodors um. Rostrum widely rounded, rostral setae arising laterally on small tubercles. Between them an arched line observable. Costulae reaching far out to the insertion of the interlamellar setae, a weak transcostula seen between their insertions. A pair of well-seclerotised basal tubercles passing into a longitudinal crest present in the interbothridial region, they frame two pairs of round spots and the interlamellar setae (Fig. 31). A pair of well-developed and arched lateral laths, directed toward the costula. Nearly the whole surface granulated. Sensillus large, asymmetrically dilated and unilaterally spinose, pectinate.

Notogaster: Dorsosejugal suture arched medially, with a well-developed crista. Humeral processes normal, standing opposite to the posterior both ridial tubercles. Ten pairs of notogastral setae present, they are all slightly thickened, bacilliform and pilose, excepting setae c_2 .

Lateral part of podosoma: Well sclerotised, the surface mostly granulated (Fig. 33).

V e n t r a 1 r e g i o n s (Fig. 32): Epimeral borders conspicuous, epimeral fields separated by thick bands. Epimeral fields ornamented by a polygonal sculpture. A sharp, arched minitectum present along the posterior border, near the genital opening. Anogenital setal formula: 5 - 1 - 2 - 3. All setae short (excepting the anterior genital ones), setae ad_1 in postanal, setae ad_3 in preanal position.

R e m a r k s: The new species stands nearest to *Oxyoppia pilosa* Balogh & Mahunka, 1981 described from Paraguay but differs from it by the conspicuously long crista, the longer costulae, the position of the weak transcostula and by the strongly arched laths near to the posterior epimeral borders.



Figs 31-33

Oxyoppia antillensis sp. n. – 31: body in dorsal aspect, 32: body in ventral aspect, 33: podosoma in lateral aspect.

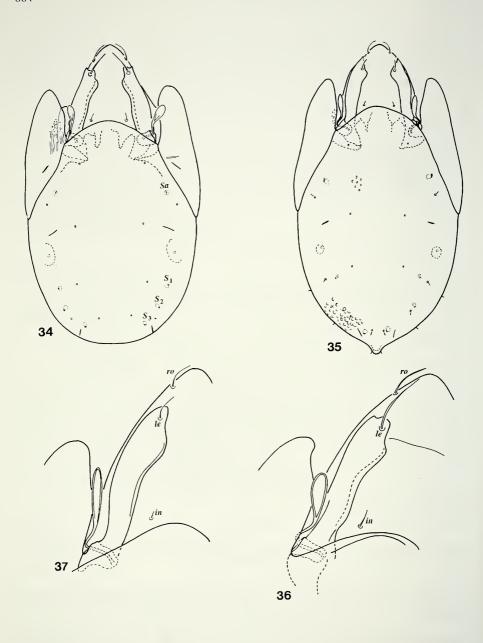
Derivationominis: This is the first Oxyoppia species known from the Antilles.

Parakalumma piton sp. n.

Figs 34-36

Material examined: Holotype: St. Lucia: STL-79/7; 6 paratypes: from the same sample: 4 paratypes: STL-79/3; 2 paratypes: STL-79/6; 2 paratypes: STL-79/12; 3 paratypes: STL-79/17. Holotype and 11 paratypes: MHNG, 6 paratypes: (1566-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 291-376 μ m (female), 331-352 μ m (male), width of body: 160-211 μ m (female), 175-181 μ m (male).



Figs 34-37

Parakalumma piton sp. n. – 34: body in dorsal aspect (?), 35: body in dorsal aspect (3), 36: lamella and sensillus (?).

Parakalumma foveolata Balogh & Mahunka, 1969. – 37: lamella and sensillus (?).

Prodors um: (Female): Rostrum rounded, rostral setae simple. Lamellae with a small anterolateral incision and a spine (Fig. 34). Lamellar setae twice as long as the rostrals, interlamellar setae conspicuous. Sensillus comparatively short, its capitulum wide. (Male): Lamellae without anterolateral incision and spine, gradually narrowing anteriorly. Sensillus thinner and longer (Fig. 35) than in the female.

Not o g a s t e r: In both sexes: Ten pairs of minute notogastral setae. Four pairs of sacculi present, *Sa* much larger than the others and their inner surface punctate (resembling a porose area). Pustulate sculpture in males (Fig. 35).

Lateral part of podosoma: Tutorium very short, without cusp, a conspicuous line runs from acetabulum I to the insertion of rostral seta. Pedotecta I and II-III normally developed, discidium large. Circumpedal carinae conspicuous, reaching the lateral margin of ventral plate and running far anteriorly.

G n a t h o s o m a : Palpal femur with strong transversal ridges. Palp setal formula: 2 - 1 - 3 - 9 + 1. Eupathidium *acm* and the solenidium fused with each other.

V e n t r a 1 r e g i o n s: Median part of the coxisternal region ornamented by weak foveolae, on the ventral plate some rounded, but even weaker foveolae present. Epimeral setal formula: 3 - 1 - 3 - 3. Anogenital setal formula: 4 - 1 - 2 - 3. Lyrifissures *iad* in adanal position. All setae in the ventral regions short and simple.

Legs: All legs monodactylous, with large claws. Seta ft" and ε inserted behind solenidia ω_1 and ω_2 . ϕ_1 and ϕ_2 arising on a projection. A well developed blade-like formation on femora III and IV ventrally.

R e m a r k s: The new species stands very near *Parakalumma foveolata* Balogh & Mahunka, 1969. Re-examination of a paratype of this species shows that it can unambiguously be distinguished from the new species by the form of the lamellae (Fig. 37) in the female and the lacking of the peculiar pustulate sculpture of the notogaster (shown in Fig. 35) in the male. In both sexes of the new species the foveolate sculpture is much weaker than in *P. foveolata*. This species differs also from the new one by the form of the sensillus (much thinner in *P. foveolata*) and the length and ratio of the prodorsal setae (much longer in the female of the new species, Fig. 36).

Derivatio nominis: named after the characteristic mountain of St. Lucia Island.

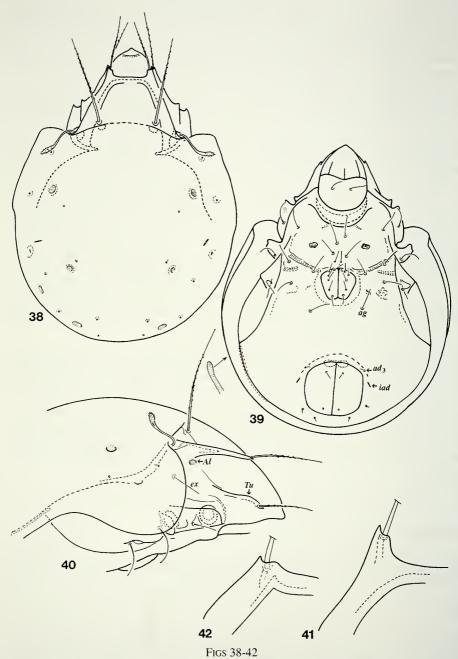
Unguizetes similis sp. n.

Figs 38-41

Material examined: Holotype: St. Lucia: STL-79/19; 4 paratypes: from the same sample; 1 paratype: STL-79/1. Holotype and 3 paratypes: MHNG, 2 paratypes: (1564-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: 560-691 μ m, width of body: 477-544 μ m.

Prodors um: Rostrum nearly triangular in dorsal view. Lamellae with comparatively long and narrow cusps (Fig. 41), their outer apex sharply pointed. Rostral, lamellar and interlamellar setae simple, setiform, somewhat ciliated. Sensillus directed outwards and backwards, with a long pedicel and a small, finely ciliate capitulum.



Unguizetes similis sp. n. – 38: body in dorsal aspect, 39: body in ventral aspect, 40: podosoma in lateral aspect, 41: lamellar cusp.

Unguizetes incertus Balogh & Mahunka, 1969. – 42: lamellar cusp.

N o t o g a s t e r: Surface finely punctate. Dorsosejugal suture faint between the insertion of interlamellar setae. Four pairs of small and round areae porosae and ten pairs of setal alveoli present on the notogaster (Fig. 38).

Lateral part of podosoma (Fig. 40): Tutorium well developed, with a short cusp, rostral seta inserted close to it. Exobothridial setae conspicuously long and thin. Pedotecta II-III and the discidium large.

V e n t r a l r e g i o n s (Fig. 39): Apodemes short or absent (excepting the sejugal ones). Epimeral borders hardly discernible. All epimeral setae long, but their length variable. Anogenital setal formula: 6 - 1 - 2 - 3. The setae in this region short and simple. A band of areae porosae observable along the margin of the ventral plate, beginning at the connecting of the circumpedal carina.

L e g s : All legs tridactylous, haterodactyly present. Solenidia of tibia I inserted on a protuberance. Femora of legs II-IV wit a blade-like formation ventrally.

R e m a r k s: The new species stands nearest to *Unguizetes incertus* Balogh & Mahunka, 1969. It is distinguished from the latter by the absence of the characteristic, polygonal sculpture, by the much narrowed lamellae running near to each other (broadened in *U. incertus*) and by the form of the lamellar cusps (for *U. incertus* see in Fig. 42). In *U. incertus* the dorsosejugal suture is also faint medially, but not absent, as mentioned in the original description.

Derivationominis: The species is similar to *Unguizetes incertus* (Balogh & Mahunka, 1969).

Eupelops spongiosus sp. n.

Figs 43-44

Material examined: Holotype: St. Lucia: STL-79/8: MHNG.

Measurements. - Length of body: 476 μm, width of body: 372 μm.

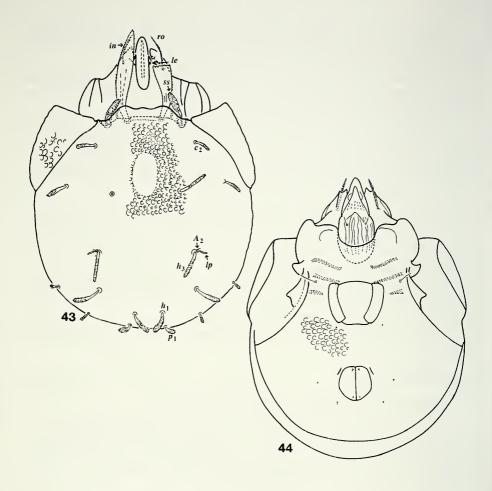
Prodorsum: Its size typical for the genus. Interlamellar region U-shaped, wide. Lamellar surface finely foveolated. Tutorium also wide, well developed (Fig. 43). Rostral and lamellar setae distinctly barbed, interlamellar setae very large, phylliform. Sensillus short, its capitulum fusiform.

Notogastral lenticulus and the lateral part of the pteromorphae. It seems to be foveo-late. Pteromorphae large, the hinge-like line conspicuous. Anterior notogastral tectum covering the basal part of prodorsum, its anterior margin waved. Ten pairs of mostly dilated notogastral setae present, setae lp and h_3 stand close to one another. The former much smaller than the latter (Fig. 43). Owing to the cerotegument sculpture I was unable to find all four pairs of areae porosae and the position of the lyriffisures.

V e n t r a l r e g i o n s : Mentum ornamented by mostly longitudinal, anteriorly converging striations. Coxisternal and ventral surface covered by thick cerotegument. Its sculpture similar to that of the notogaster; therefore, most of the epimeral setae invisible (Fig. 44).

L e g s: All legs tridactylous, a strong heterodactyly present.

R e m a r k s: The new species is well characterised by the sculpture of the cerotegument layer. Within the species group which is characterised by the closely



Figs 43-44

Eupelops spongiosus sp. n. – 43: body in dorsal aspect, 44: body in ventral aspect.

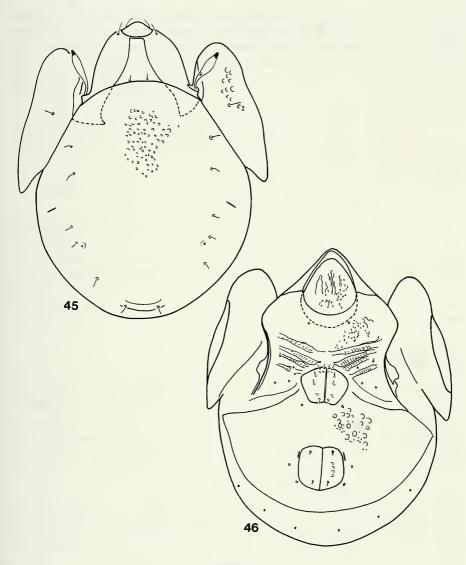
adjacent setae lp and h_3 , a similar sculpture is known in E. foveolatus Engelbrecht, 1975 described from South Africa. However, the sensillus of the latter species is much shorter and its head is truncate.

Derivatio nominis: named after the characteristic sculpture of the notogaster.

Truncozetes rugosus sp. n.

Figs 45-46

Material examined: Holotype: St. Lucia: STL-79/1; 3 paratypes: from the same sample. Holotype and 2 paratypes: MHNG, 1 paratype: (1565-PO-96): HNHM.



Figs 45-46

Truncozetes rugosus sp. n. - 45: body in dorsal aspect, 46: body in ventral aspect.

M e a s u r e m e n t s . - Length of body: 233-244 μ m, width of body: 171-176 μ m.

In tegument: Nearly the whole surface covered by cerotegument granules which, on some parts of body (e.g., dorsosejugal region), is more distinct than on other parts. Cuticle foveolate or punctate, mentum with irregular longitudinal rugae.

Prodorsum: Rostrum elongated, rounded. Lamellae wide, obliquely truncate anteriorly. Translamella narrow, almost linear (Fig. 45). Lamellar and rostral setae thin setiform, interlamellar ones minute. Sensillus fusiform, its distal end elongate, this part much darker than the rest. Bothridium opened anteriorly.

Notogastral setae present. A weak but conspicuous elevation in posteromarginal position.

V e n t r a l r e g i o n s (Fig. 46): Mentum rugose and foveolate. Epimeral region ornamented by smaller, ventral plate by larger, foveolae. The smaller foveolae sometimes confluent. Epimeral borders and some apodemes also conspicuous, bo_2 forming a transversal band, the others compose a network in front of the genital opening. Epimeral setae hardly visible, minute. Six pairs of genital setae present.

L e g s : All legs tridactylous, a strong heterodactyly present.

R e m a r k s: The new species stands near to the type species of the genus, *Truncozetes mucronatus* Balogh & Mahunka, 1969. However it is clearly distinguishable by the absence of the longitudinal pattern on the coxisternal region and the much weaker and irregular sculpture on the mentum, which consists of regular longitudinal sulci in *T. mucronatus*.

Derivation ominis: This species is named after the sculpture of the mentum.

Paracarinogalumna gen. n.

D i a g n o s i s : Family *Galumnidae*. Prodorsal surface with a well sclerotised, sharp, median keel, resembling a crest or carina. Lamellar lines protruding anteriorly and composing a keel-shaped formation like a costula and similar to the median keel. All three crests run to the rostral apex, which is characteristically triangular. Sublamellar lines strong, normally developed, well arched. Lamellar setae arising on lamellar keel, rostral setae very near to it. Dorsosejugal suture complete. Notogaster with 4 pairs of areae porosae, 10 pairs of setal alveoli (true setae absent). Median pori absent. Coxisternal region normal, pedotecta I sharply pointed. Anogenital setal formula: 6 - 1 - 2 - 3. Lyriffissures *iad* located far laterally from the anal aperture. Porose area postanalis absent. All legs tridactylous, heterodactyly weak. Solenidium ω_2 and ε stand behind ω_1 .

Type species: Paracarinogalumna genavensium sp. n.

R e m a r k s: The lamellar line is formed like a blade. This feature, along with the median keel, is known in the family Galumnidae (*Carinogalumna* Engelbrecht, 1973). The new taxon stands close to this genus, although the blade-like formation is only partial and it is the lamellar line which continues in an arched, sharp blade not bearing the lamellar seta; furthermore, the sublamellar line is reduced, or at least partly missing, while the porose area postanalis is completely lacking. The genus *Carinogalumna* has median pori and the lyrifissure *iad* is in the adanal position; on the other hand, in the new species, the median pori are missing, while lyrifissure *iad*

is far removed from anal aperture. Consequently, it is not considered here as a member of the South African genus *Carinogalumna*.

Derivatio nominis: The new genus is very near to *Carinogalumna* Engelbrecht, 1973.

Paracarinogalumna genavensium sp. n.

Figs 47-51

Material examined: Holotype: St. Lucia: STL-79/8; 9 paratypes: from the same sample; 18 paratypes: STL-79/1; 1 paratype: STL-79/5; 4 paratypes: STL-79/11; 2 paratypes: STL-79/15; 1 paratype: STL-79/17. Holotype and 23 paratypes: MHNG, 12 paratypes: (1569-PO-96); HNHM.

M e a s u r e m e n t s . - Length of body: 766-865 $\mu m,$ width of body: 589-642 $\mu m.$

Prodors um: Rostral apex sharply pointed. Lamellar keel running toward the rostral apex but not reaching it. The position of the rostral and lamellar setae as shown in Fig. 50. Interlamellar setae reduced, hardly visible or represented only by their alveoli. Sensillus lanceolate, its head with some spicules (Fig. 47).

Not o g as ter: Dorsosejugal suture complete. Four pairs of porose areae present, Aa gradually widened to the lateral margin of notogaster. A_3 narrow, long. Median pori absent, lyrifissures im located near to porose area A_1 .

Lateral part of podosoma: As shown in Fig. 50. Circumpedal carina reaching to the lateral margin of the ventral plate.

V e n t r a l r e g i o n s (Fig. 48): Coxisternal region without spots or other sculpture. All setae minute, hardly discernible. Epimeral setal formula: 1 - 0 - 2 - 2. Only two pairs of genital setae arising on the anterior margin of the plates, the others inserted along longitudinal lines. Aggenital, anal and adamal setae also minute, setae ad_3 arising in front of lyrifissures iad.

L e g s: All legs tridactylous, a weak heterodactyly present. End of lateral claws slightly dilated. The position of the solenidial group of leg I as shown in Fig. 51. Genu IV conspicuously long, bearing two very long setae.

Legs setal formulae:

R e m a r k s: See the remarks after the generic diagnosis.

Derivation ominis: In honour of the staff of the Geneva Museum and especially of T. Jaccoud and L. de Roguin.

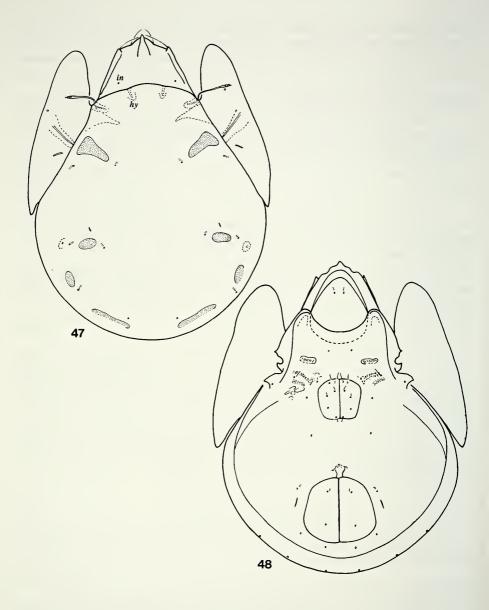
Pergalumna cucheae sp. n.

Figs 52-55

Material examined: Holotype: St. Lucia: STL-79/1; 17 paratypes: from the same sample. Holotype and 10 paratypes: MHNG, 7 paratypes: (1567-PO-96): HNHM.

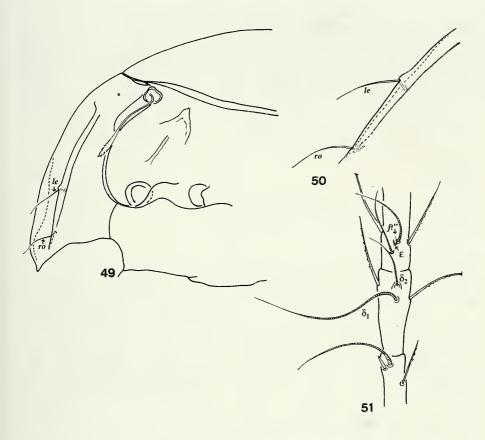
M e a s u r e m e n t s : - Length of body: $650-758 \mu m$, width of body: $460-552 \mu m$.

Prodors um: Rostral part characteristically modified, rostral apex protruding in a wide nose forwards, with a weak but wide transversal band behind it. Both anterior prodorsal setae long, thin, nearly equal in length. Interlamellar setae represented only by their alveoli. Sensillus setiform, smooth, simple.



Figs 47-48

Paracarinogalumna genavensium gen. n., sp. n. – 47: body in dorsal aspect, 48: body in ventral aspect.



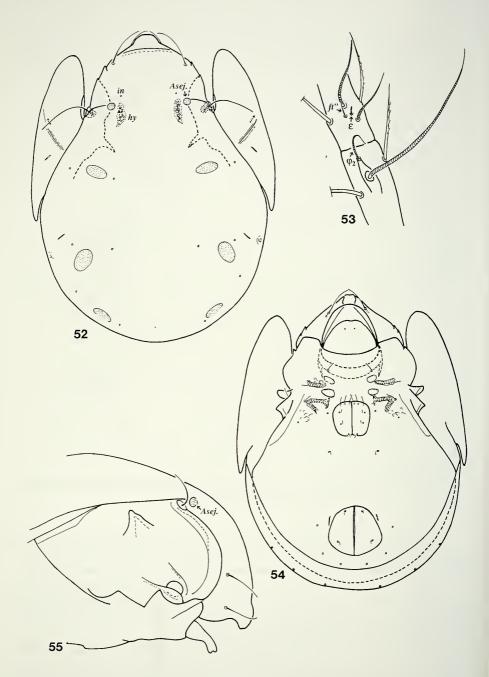
Figs 49-51

Paracarinogalumna genavensium gen. n., sp. n. – 49: podosoma in lateral aspect, 50: lamellar line, 51: solenidial group of leg I.

N o t o g a s t e r (Fig. 52): Dorsosejugal suture interrupted between the round sejugal porose area. Structure *hy* conspicuously large. Three pairs of areae porosae and 10 pairs of setal alveoli present, no essential difference among the areae porosae.

Lateral part of podosoma: Lamellar and sublamellar line well developed, gradually arching toward the margin of the coxisternal region. They run parallel to each other. Anterior margin of mentum very thick (Fig. 55). Circumpedal carina reaching to the lateral margins of the ventral plate.

V e n t r a l r e g i o n s (Fig. 54): Epimeral surface without characteristic sculpture. All epimeral setae simple and conspicuous, epimeral setal formula: 1 - 0 - 2 - 3. Three pairs of genital setae inserted on the anterior margin of the genital plates. Aggenital, anal and adanal setae minute, hardly visible. Their position typical for the family.



Figs 52-55

Pergalumna cucheae sp. n. – 52: body in dorsal aspect, 53: solenidial group of leg I, 54: body in ventral aspect, 55: podosoma in lateral aspect.

Legs: The solenidial group of leg I as shown in Fig. 53.

R e m a r k s: The new species is well characterised by the form of the rostrum. It slightly resembles *Pergalumna clericata* (Berlese, 1914), which was designated by Pérez-Iñigo & Baggio (1994) as the type of the genus *Pseudogalumna*. However, the rostrum of the new species is rounded and, without a keel. The three pairs of notogastral porose areas are also typical for the genus *Pergalumna* Grandjean, 1936. Therefore it fits well to the latter genus.

Derivation ominis: I dedicate the new species to Mrs T. Cuche (Geneva Museum) in recognition of her invaluable help during my stay in Geneva.

Pilogalumna antillensis sp. n.

Figs 56-59

Material examined: Holotype: St. Lucia: STL-79/82; 7 paratypes: from the same sample. Holotype and 4 paratypes: MHNG, 3 paratypes: (1568-PO-96): HNHM.

M e a s u r e m e n t s . - Length of body: $683-781~\mu m$, width of body: $526-622~\mu m$.

Prodors um: Rostrum simple, conical. Lamellar lines absent, sublamellar lines (S) well developed, arched downwards and fused with the epimeral margin (Fig. 59). Prodorsal setae short or reduced, rostral setae longer than the lamellar ones. Interlamellar setae represented only by their alveoli. Sensillus directed forwards, narrow lanceolate, with a few capitular spicules.

Noto g as ter: Dorsosejugal suture complete, the thickening behind it (hy) round (Fig. 56). Notogaster smooth, pteromorphae with some radiate crests. Four pairs of comparatively small porose areae present. Aa and A_3 characteristically elongated, A_1 irregular. Ten pairs of minute notogastral setae or their alveoli present, at least setae c_2 , da and p_1 clearly visible.

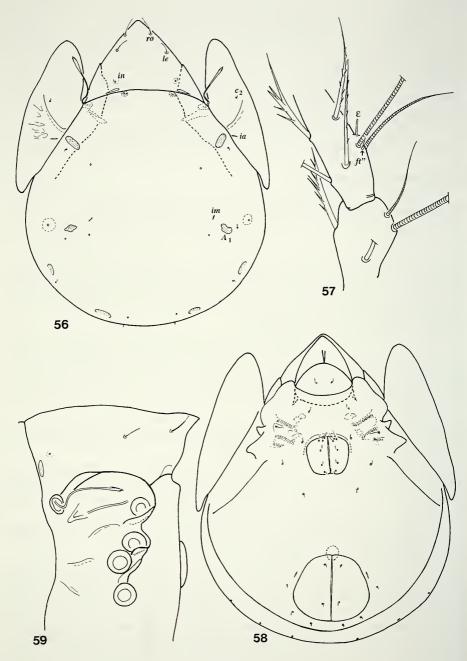
Lateral part of podosoma: Pedotecta I small, pedotecta II-III normal, discidium rounded laterally. Circumpedal carina short, ending far from the lateral margin on the ventral plate.

V e n t r a l r e g i o n s (Fig. 58): Epimeral surface hardly ornamented, only a few spots visible. Epimeral setal formula: 1 - 0 - 2 - 1, all setae minute. Anogenital setal formula: 6 - 1 - 2 - 3, all setae also minute. Three pairs of setae concentrated on the anterior margin of genital plates. Lyrifissure *iad* in adanal position.

L e g s : All legs tridactylous, a weak heterodactyly observable. Both solenidia of tarsus I inserted near to each other, in a transversal line (Fig. 57).

R e m a r k s: The classification of this species is rather problematic, because the absence of the sublamellar lines is one of the main characteristics of the genus Pilogalumna Grandjean, 1956. They are well developed in this species! However, on the basis of the other characters (minute notogastral setae, position of ϵ on tarsus I) it fits well into this group. Further studies are necessary to decide the final position of this species. Hitherto, the genus has not been recorded from the Neotropical region.

Derivatio nominis: Named after the zoogeographical region, where the species was collected.



Figs 56-59

Pilogalumna antillensis sp. n. – 56: body in dorsal aspect, 57: solenidial group of leg I, 58: body in ventral aspect, 59: podosoma in lateral aspect.

ACKNOWLEDGEMENTS

I would like to express my gratitude to Mr T. Jaccoud and to late Dr L. de Roguin (1948 - 1998), both collaborators of the Geneva Museum, for their assistance in 1979. In that year my wife and I planned and paid for a trip to St. Lucia, but we did not get a visa. At the last minute T. Jaccoud and L. de Roguin offered to undertake – at their own expense – this collecting trip instead of us and helped us in this way to save our money and postpone our trip for the following year (1980). This exemplary help between colleagues should be especially emphasized.

I am also very grateful to Dr Malcolm Luxton (National Museum of Wales, Cardiff) for critical reading of the manuscript and for his valuable suggestions.

REFERENCES

- BALOGH, J. & MAHUNKA, S. 1974. A foundation of the Oribatid (Acari) fauna of Cuba. *Acta Zoologica Academiae Scientarum Hungaricae* 20: 1-25.
- Grandjean, F. 1929. Quelques nouveaux genres d'*Oribatei* du Venezuela et de la Martinique. *Bulletin de la Société Zoologique de France* 54: 400-423.
- Grandjean, F. 1930. Oribates nouveaux de la région Caraïbe. *Bulletin de la Société Zoologique de France* 55: 262-284.
- MAHUNKA, S. 1985. Mites (Acari) from St. Lucia (Antilles). 2. Oribatida. *Acta Zoologica Hungarica* 31: 119-178.
- MAHUNKA, S. 1994. Oribatids from Madagascar II. (Acari: Oribatida). (New and interesting mites from the Geneva Museum LXXIX.). Revue suisse de Zoologie 101: 47-88.
- NIEDBAŁA, W. 1985. Essai critique sur Mesoplophora (Acari, Oribatida, Mesoplophoridae).

 Annales Zoologici 39: 93-117.
- PÉREZ-IÑIGO, C. & BAGGIO, D. 1994. Oribatides édaphiques du Brésil (VIII). Oribates de l'état de São Paulo (Cinquième partie). *Acarologia* 35: 181-198.
- SUBÍAS, L. S. & BALOGH, P. 1989. Identification keys to the genera of Oppiidae Grandjean, 1951 (Acari: Oribatei). *Acta Zoologica Hungarica* 35: 355-412.
- WILLMANN, C. 1933. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao and Aruba im Jahre 1930. No. 10. Trimalaconothrus pilipes, eine neue Oribatide aus Westindien. *Zoologische Jahrbücher. Abteilung für Systematik* 64: 447-452.